

WHAT IS CLAIMED IS:

1. An isolated and purified polynucleotide that encodes a peroxisome proliferator-activated receptor polypeptide.

2. The isolated and purified polynucleotide of Claim 1, wherein said polynucleotide is a DNA molecule.

3. The DNA molecule of Claim 2, wherein said encoded polypeptide is a peroxisome proliferator-activated receptor *gamma*.

4. The DNA molecule of Claim 2, wherein said encoded polypeptide comprises the amino acid residue sequence of SEQ ID NO:2.

5. The isolated and purified polynucleotide of Claim 1, wherein said polynucleotide comprises the nucleotide base sequence of SEQ ID NO:1.

6. An isolated and purified polynucleotide that encodes a peroxisome proliferator-activated receptor polypeptide, said polynucleotide preparable by a process comprising the steps of:

- (a) constructing a library of cDNA clones from a cell that expresses said polypeptide;
- (b) screening the library with a radio-labelled oligonucleotide probe;
- (c) identifying a clone that hybridizes to the probe; and
- (d) isolating the hybridized clone from the library of unhybridized clones.

7. The isolated and purified polynucleotide of Claim 6, wherein said polynucleotide is prepared by a process comprising the steps of:

- (a) constructing a library of cDNA clones from a cell that expresses said polypeptide;
- (b) screening the library with a radio-labelled oligonucleotide probe;
- (c) identifying a clone that hybridizes to the probe; and
- (d) isolating the hybridized clone from the library of unhybridized clones.

8. An isolated and purified polynucleotide comprising a base sequence that is identical or complementary to a segment of at least 10 contiguous bases of SEQ ID NO: 1, wherein said polynucleotide hybridizes to a polynucleotide that encodes a peroxisome proliferator-activated receptor polypeptide.

9. An isolated and purified peroxisome proliferator-activated receptor polypeptide.

10. The receptor polypeptide of Claim 9, wherein the polypeptide is a peroxisome proliferator-activated receptor *gamma* polypeptide.

11. The peroxisome proliferator-activated receptor polypeptide of Claim 9 that comprises the amino acid residue sequence of SEQ ID NO:2.

12. An expression vector comprising a polynucleotide that encodes a peroxisome proliferator-activated receptor polypeptide.

13. The expression vector of Claim 12, wherein the polynucleotide comprises the nucleotide base sequence of SEQ ID NO:1.

14. A recombinant host cell transfected with a polynucleotide that encodes a peroxisome proliferator-activated receptor polypeptide.

15. The recombinant host cell of Claim 14, wherein the cell is transfected with the polynucleotide of SEQ ID NO:1.

16. A process of preparing a peroxisome proliferator-activated receptor polypeptide comprising:

- (a) transfecting a cell with a polynucleotide that encodes the polypeptide to produce a transformed host cell; and
- (b) maintaining the transformed host cell under biological conditions sufficient for expression of the polypeptide.

17. The process of Claim 16 wherein said polynucleotide comprises the nucleotide base sequence of SEQ ID NO:1.

18. An antibody immunoreactive with a peroxisome proliferator-activated receptor polypeptide.

19. The antibody of Claim 18, wherein said antibody is a polyclonal or a monoclonal antibody.

20. A process of detecting a peroxisome proliferator-activated receptor polypeptide, wherein the process comprises:

- (a) immunoreacting the polypeptide with the antibody of Claim 18 to form an antibody-polypeptide conjugate; and
- (b) detecting the conjugate.

21. A process of detecting a messenger RNA transcript that encodes a peroxisome proliferator-activated receptor polypeptide, wherein the process comprises:

- 5 (a) hybridizing the messenger RNA transcript with a polynucleotide sequence that encodes the peroxisome proliferator-activated receptor polypeptide to form a duplex; and
(b) detecting the duplex.

10 22. A pharmaceutical composition comprising a peroxisome proliferator-activated receptor polypeptide and a physiologically acceptable carrier.

15 23. A diagnostic assay kit for detecting the presence of a peroxisome proliferator-activated receptor polypeptide in a biological sample, said kit comprising a first container containing a first antibody capable of immunoreacting with said peroxisome proliferator-activated receptor polypeptide, wherein said first antibody is present in an amount sufficient to perform at least one assay.

20 24. A diagnostic assay kit for detecting the presence, in a biological sample, of a first polynucleotide that encodes a peroxisome proliferator-activated receptor polypeptide, said kit comprising a first container that contains a second polynucleotide identical or complementary to a segment of at least 10 contiguous nucleotide bases of SEQ ID NO: 1.

25 25. A process of screening a substance for its ability to interact with a peroxisome proliferator-activated receptor, said process comprising the steps of:

- add a^2

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	